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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVE., NW WASHINGTON, DC 20036			EXAMINER LAFORGLA, CHRISTIAN A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,608

Applicant(s)

NAKANISHI ET AL.

Examiner

Christian LaForgia

Art Unit

2139

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 11/7/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-12 have been presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority. ***Information***

Disclosure Statement

3. The information disclosure statement (IDS) submitted on 07 November 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Drawings

4. Figure 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,406,627 to Thompson et al., hereinafter Thompson.

7. As per claim 1, Thompson teaches a television receiver (Figures 1A [Subscriber box 22], 2A [Video receiver 122], i.e. subscriber box) for inputting an encrypted digital video signal (Figures 1A [Subscriber box 22 receiving scrambled or non-scrambled video from Transmitter 12], 2A [Subscriber box 122 receiving scrambled or non-scrambled video from Transmitter 112]) into a decoding circuit that is provided inside a casing surrounded by a casing cover and a casing body (Figures 1A [Descrambling Control Unit 24], 2A [Descrambling Control Unit 124]), and visualizing a digital or analog video signal that is decrypted in the decoding circuit (Figure 2A [Stereo Television Set 130]), in a video display unit positioned inside the casing, said television receiver comprising:

a cover opening/closing detector for detecting opening/closing of the casing cover (column 17, lines 30-32, i.e. detecting an attempt to open a housing); and

a switch for controlling a power supply voltage that is applied to the decoding circuit, in accordance with an output of the cover opening/closing detector (Figure 4A [block 404], column 17, lines 26-33, i.e. a tamper-activated switch 404 which automatically interrupts the power supply to the PLD 411);

wherein power is supplied to the decoding circuit through the switch when the output of the cover opening/closing detector indicates that the casing cover is closed, and the supply of power to the decoding circuit is cut off by the switch when the output of the cover opening/closing detector indicates that the casing cover is opened (column 17, lines 26-33, i.e. a

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tamper-activated switch **404** which automatically interrupts the power supply to the PLD **411** when the case is opened).

8. Regarding claim 4, Thompson teaches wherein said cover opening/closing detector comprising:

a condenser means (Figure 4 [block 403], column 17, lines 13-31, i.e. battery);

a charging means for charging the condenser means (Figure 4 [block 403], column 17, lines 13-31);

a discharging means for discharging the condenser means when the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33, i.e. a tamper-activated switch **404** which automatically interrupts the power supply); and

an opening detection means for recognizing that the condenser means is discharged, thereby detecting that the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 5-7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of U.S. Patent No. 5,243,651 to Parikh et al., hereinafter Parikh.

11. As per claim 2, Thompson teaches a television receiver (Figures 1A [Subscriber box 22], 2A [Video receiver 122], i.e. subscriber box) for inputting an encrypted digital video signal (Figures 1A [Subscriber box 22 receiving scrambled or non-scrambled video from Transmitter 12], 2A [Subscriber box 122 receiving scrambled or non-scrambled video from Transmitter 112]) into a decoding circuit that is provided inside a casing surrounded by a casing cover and a casing body (Figures 1A [Descrambling Control Unit 24], 2A [Descrambling Control Unit 124]), and visualizing a digital or analog video signal that is decrypted by the decoding circuit (Figure 2A [Stereo Television Set 130]), in a video display unit positioned inside the casing, said television receiver comprising:

a cover opening/closing detector for detecting opening/closing of the casing cover (column 17, lines 30-32, i.e. detecting an attempt to open a housing).

12. Thompson does not teach an input means provided outside the casing body; and a decoding control circuit for controlling decoding parameters of the decoding circuit in accordance with the output of the cover opening/closing detector and the input from the input means; wherein the decoding control circuit outputs a parameter for performing the decoding operation to the decoding circuit when the output of the cover opening/closing detector indicates that the casing cover is closed and when there is a predetermined input from the input means, and the decoding control circuit outputs a parameter for stopping the decoding operation to the decoding circuit when there is no predetermined input from the input means and the output of the cover opening/closing detector indicates that the casing cover is opened.

13. Parikh teaches an input means (column 3, lines 42-45, column 10, lines 42-49, i.e. inserting the tamper override module (TOM) into the interdiction unit); and

a decoding control circuit for controlling decoding parameters of the decoding circuit in accordance with the output of the cover opening/closing detector and the input from the input means (Figure 8, column 10, lines 42-49, column 15, line 57 to column 16, line 25, i.e. decoding information from TOM and open case);

wherein the decoding control circuit outputs a parameter for performing the decoding operation to the decoding circuit when the output of the cover opening/closing detector indicates that the casing cover is closed and when there is a predetermined input from the input means, and the decoding control circuit outputs a parameter for stopping the decoding operation to the decoding circuit when there is no predetermined input from the input means and the output of the cover opening/closing detector indicates that the casing cover is opened (Figure 8, column 10, lines 42-49, column 15, line 57 to column 16, line 25).

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an input means provided outside the casing body; and a decoding control circuit for controlling decoding parameters of the decoding circuit in accordance with the output of the cover opening/closing detector and the input from the input means; wherein the decoding control circuit outputs a parameter for performing the decoding operation to the decoding circuit when the output of the cover opening/closing detector indicates that the casing cover is closed and when there is a predetermined input from the input means, and the decoding control circuit outputs a parameter for stopping the decoding operation to the decoding circuit when there is no predetermined input from the input means and the output of the cover opening/closing detector indicates that the casing cover is opened, since Parikh states at column 10, lines 42-49 that

providing input means allows a technician to service the equipment without setting off an indication that the device has been altered.

15. As per claim 5, Thompson teaches an electronic device apparatus having an electronic device that is provided inside a casing surrounded by a casing cover and a casing body, comprising:

a condenser means (Figure 4 [block 403], column 17, lines 13-31, i.e. battery);

a charging means for charging the condenser means (Figure 4 [block 403], column 17, lines 13-31, i.e. charging the battery);

a discharging means for discharging the condenser means when the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33, i.e. a tamper-activated switch **404** which automatically interrupts the power supply);

an opening detection means for recognizing that the condenser means is discharged, thereby detecting that the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33).

16. Thompson does not teach a number-of-discharging storage means for storing the number of times the condenser means is discharged.

17. Parikh teaches setting a flag indicating that tampering has occurred with respect to the device (Figure 8 [block 850], column 17, lines 13-51).

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a number-of-discharging storage means for storing the number of times the condenser means is discharged, since Parikh states at column 10, lines 42-49 that it could serve

to provide an indication that someone other than a certified technician is trying to access and modify the receiver.

19. Regarding claim 6, Parikh teaches an operation restriction means for restricting the operation of the electronic device apparatus when the number of discharging that is stored in the number-of-discharging storage means reaches a predetermined number of times (column 17, lines 1-12, i.e. providing interference, such as a cutoff of the signal, scrambling the signal, periodically scrambling the signal and supplying a pulsing signal).

20. Regarding claim 7, Parikh teaches a display means for performing display using a display unit that is provided inside or outside the casing, and a control means for controlling the display means so that the display means performs display that is different from normal display, when the number of discharging stored in the number-of-discharging storage means reaches a predetermined number of times (column 17, lines 1-12, i.e. providing interference, such as a cutoff of the signal, scrambling the signal, periodically scrambling the signal and supplying a pulsing signal).

21. Regarding claim 12, Thompson teaches wherein said cover opening/closing detector comprising:

a condenser means (Figure 4 [block 403], column 17, lines 13-31, i.e. battery);

a charging means for charging the condenser means (Figure 4 [block 403], column 17, lines 13-31;

a discharging means for discharging the condenser means when the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33, i.e. a tamper-activated switch **404** which automatically interrupts the power supply); and

an opening detection means for recognizing that the condenser means is discharged, thereby detecting that the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33).

22. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of U.S. Patent No. 5,051,601 to Atobe et al., hereinafter Atobe.

23. Regarding claim 3, Thompson does not teach wherein said cover opening/closing detector comprising a code sequence generation circuit; a light emitter for converting an electric signal from the code sequence generation circuit into light; a light receiver for converting a light signal into an electric signal; a light guide for guiding the light outputted from the light emitter to the light receiver, when the casing cover is closed; a demodulation circuit for demodulating the electric signal from the light receiver; and a comparison circuit for comparing the output of the code sequence generation circuit with the output of the demodulation circuit, and outputting a signal indicating that the casing cover is closed, when these outputs are equal to each other.

24. Atobe teaches wherein said cover opening/closing detector comprising:

a code sequence generation circuit (column 3, lines 50-64, i.e. 8-bit code);

a light emitter for converting an electric signal from the code sequence generation circuit into light (Figure 1 [elements 53, 54], column 2, lines 55-67);

a light receiver for converting a light signal into an electric signal (Figure 1 [elements 55, 56], column 2, lines 57-67);

a light guide for guiding the light outputted from the light emitter to the light receiver, when the casing cover is closed (Figure 1 [elements 57, 59], column 2, line 61 to column 3, line 3);

a demodulation circuit for demodulating the electric signal from the light receiver (Figure 1 [elements 55, 56], column 2, lines 57-67, i.e. optical communication units contain demodulating devices); and

a comparison circuit for comparing the output of the code sequence generation circuit with the output of the demodulation circuit, and outputting a signal indicating that the casing cover is closed, when these outputs are equal to each other (column 9, lines 13-31).

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a light system for detecting whether the case is open or closed, since Atobe states in the Abstract that this eliminates the need for cables, thereby avoiding complicated wiring operations, preventing interference from noise, and reducing the overall volume of the apparatus.

26. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of U.S. Patent No. 6,175,925 B1 to Nardone et al., hereinafter Nardone.

27. As per claim 8, Thompson teaches an electronic device apparatus including an exchangeable electronic device having its own ID, inside a casing surrounded by a casing cover and a casing body, comprising:

a condenser means (Figure 4 [block 403], column 17, lines 13-31, i.e. battery);

a charging means for charging the condenser means (Figure 4 [block 403], column 17, lines 13-31, i.e. charging the battery);

a discharging means for discharging the condenser means when the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33, i.e. a tamper-activated switch **404** which automatically interrupts the power supply);

an opening detection means for recognizing that the condenser means is discharged, thereby detecting that the casing cover is opened (Figure 4A [block 404], column 17, lines 26-33).

28. Thompson does not teach an ID comparison means for comparing, when it is recognized that the casing cover is opened and closed, the IDs of the electronic device before and after the opening and closing of the casing cover.

29. Nardone teaches comparing signatures to determine if a non-tamper resistant area of a content player has been tampered with (Figure 3 [block 128], column 4, lines 9-21).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an ID comparison means for comparing, when it is recognized that the casing cover is opened and closed, the IDs of the electronic device before and after the opening and closing of the casing cover, since Nardone states at column 3, lines 30-44 that it provides tamper resistant measures including integrity verification and anti-observation measures, thereby preventing unauthorized subscribers from accessing services and programs that they do not have permission to view.

31. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Nardone as applied above, and further in view of Parikh.

32. Regarding claim 9, Thompson and Nardone do not teach an operation restriction means for restricting the operation of the electronic device apparatus, when the ID of the electronic device after the opening and closing of the casing cover is identical to or older than the ID of the electronic device before the opening and closing of the casing cover.

33. Parikh teaches an operation restriction means for restricting the operation of the electronic device apparatus, when the ID of the electronic device after the opening and closing of the casing cover is identical to or older than the ID of the electronic device before the opening and closing of the casing cover (column 17, lines 1-12, i.e. providing interference, such as a cutoff of the signal, scrambling the signal, periodically scrambling the signal and supplying a pulsing signal).

34. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an operation restriction means for restricting the operation of the electronic device apparatus, when the ID of the electronic device after the opening and closing of the casing cover is identical to or older than the ID of the electronic device before the opening and closing of the casing cover, since Parikh states at column 10, lines 42-49 that it could serve to provide an consequence when someone other than a certified technician tries to access and modify the receiver.

35. Regarding claim 10, Thompson and Nardone do not teach a display means for performing display using a display unit that is provided inside or outside the casing, and a control means for

controlling the display means so that the display means performs display that is different from normal display, when the ID of the electronic device after the opening and closing of the casing cover is identical to or older than the ID of the electronic device before the opening and closing of the casing cover.

36. Parikh teaches a display means for performing display using a display unit that is provided inside or outside the casing, and a control means for controlling the display means so that the display means performs display that is different from normal display, when the ID of the electronic device after the opening and closing of the casing cover is identical to or older than the ID of the electronic device before the opening and closing of the casing cover (column 17, lines 1-12, i.e. providing interference, such as a cutoff of the signal, scrambling the signal, periodically scrambling the signal and supplying a pulsing signal).

37. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a display means for performing display using a display unit that is provided inside or outside the casing, and a control means for controlling the display means so that the display means performs display that is different from normal display, when the ID of the electronic device after the opening and closing of the casing cover is identical to or older than the ID of the electronic device before the opening and closing of the casing cover, since Parikh states at column 10, lines 42-49 that it could serve to provide an consequence when someone other than a certified technician tries to access and modify the receiver.

38. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Parikh as applied above, and in further of view of Atobe.

39. Regarding claim 11, Thompson and Parikh do not teach wherein said cover opening/closing detector comprising a code sequence generation circuit; a light emitter for converting an electric signal from the code sequence generation circuit into light; a light receiver for converting a light signal into an electric signal; a light guide for guiding the light outputted from the light emitter to the light receiver, when the casing cover is closed; a demodulation circuit for demodulating the electric signal from the light receiver; and a comparison circuit for comparing the output of the code sequence generation circuit with the output of the demodulation circuit, and outputting a signal indicating that the casing cover is closed, when these outputs are equal to each other.

40. Atobe teaches wherein said cover opening/closing detector comprising:
a code sequence generation circuit (column 3, lines 50-64, i.e. 8-bit code);
a light emitter for converting an electric signal from the code sequence generation circuit into light (Figure 1 [elements 53, 54], column 2, lines 55-67);
a light receiver for converting a light signal into an electric signal (Figure 1 [elements 55, 56], column 2, lines 57-67);
a light guide for guiding the light outputted from the light emitter to the light receiver, when the casing cover is closed (Figure 1 [elements 57, 59], column 2, line 61 to column 3, line 3);
a demodulation circuit for demodulating the electric signal from the light receiver (Figure 1 [elements 55, 56], column 2, lines 57-67, i.e. optical communication units contain demodulating devices); and

a comparison circuit for comparing the output of the code sequence generation circuit with the output of the demodulation circuit, and outputting a signal indicating that the casing cover is closed, when these outputs are equal to each other (column 9, lines 13-31).

41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a light system for detecting whether the case is open or closed, since Atobe states in the Abstract that this eliminates the need for cables, thereby avoiding complicated wiring operations, preventing interference from noise, and reducing the overall volume of the apparatus.

Conclusion

42. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

43. The following patents are cited to further show the state of the art with respect to the prevention of set top boxes tampering, such as:

United States Patent No. 5,243,651 A to Parikh et al., which is cited to show a patent related to one of the patents used to reject the claims of the instant application.

United States Patent No. 5,877,697 A to Paas et al., which is cited to show detecting the tampering of a chassis of a set top box.

United States Patent Application Publication No. 2004/0187035 A1 to Schwan et al., which is cited to show destroying information if a system is broken into (see paragraph 0013).

United States Patent No. 6,396,400 B1 to Epstein, III et al., which is cited to show detecting when a computer case has been opened using several monitoring techniques.

United States Patent No. 5,267,312 to Thompson et al., which is cited to show a patent related to one of the patents used to reject the claims of the instant application.

United States Patent No. 5,185,794 to Thompson et al., which is cited to show a patent related to one of the patents used to reject the claims of the instant application.

United States Patent No. 6,388,574 B1 to Davis et al., which is cited to show detecting intrusion into a chassis using an optical system.

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian LaForgia whose telephone number is (571)272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.

45. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

46. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christian LaForgia/
Primary Examiner, Art Unit 2139
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